

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of

Amendment of Part 25 of the Commission's  
Rules to Establish Rules and Policies  
Pertaining to the Second Processing Round  
of the Non-Voice, Non-Geostationary  
Mobile Satellite Service

IB Docket No. 96-220

REPLY

Volunteers in Technical Assistance, Inc. ("VITA"), by its attorneys, hereby  
replies to the comments on the Notice of Proposed Rulemaking ("NPRM") issued in  
the above-referenced proceeding.

INTRODUCTION AND SUMMARY

The rules proposed in the NPRM not only would exclude VITA from the  
second round processing group, the proposed time-sharing of VITA's first round  
Little LEO system would render the system unusable. VITA already faces major  
constraints, some of which it acceded to in the interest of accommodating the other  
first round applicants, and some of which it could not anticipate when the first round  
applicants presented a sharing plan to the Commission. VITA has access only to a  
small fraction of the bandwidth that other systems may use; must operate under rigid  
constraints in order to satisfy sharing requirements imposed by NTIA; also must share  
with Orbcomm, whose transmitters scan through VITA's uplink frequencies; and may  
have to halve its downlink capacity to coordinate with a French satellite system.

The Commission proposes rules that would exacerbate the problems with  
VITA's existing spectrum and would deny VITA the means to resolve its problems.  
The Commission proposes to constrain VITA further by giving a new Little LEO  
operator access to VITA's uplink and downlink frequencies using an untried and  
revolutionary sharing technique. Rather than requiring that the new Little LEO  
operator protect VITA, the NPRM would leave it to "VITA and the Little LEO System-

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1 ... to make the arrangements necessary to ensure interference free operations.”<sup>1</sup> By prohibiting VITA from participating in the second round, moreover, the Commission would prevent VITA from gaining access to the additional spectrum it needs to make up for the shortcomings it presently confronts.

Despite the complexity of the issues raised in the NPRM, the commenting parties generally have overlooked the important differences between the services provided by VITA in the furtherance of its humanitarian mission and those of commercial Non-Voice, Non-Geostationary Mobile Satellite Service (“NVNG MSS”) operators. Due to the nature of its mission, VITA simply cannot be grouped with other NVNG MSS licensees and applicants. VITA exists to serve the needs of developing nations, rather than to maximize profits for shareholders. Concerns with commercial competition that arguably favor the exclusion of current commercial licensees from the second processing round are an inappropriate yardstick for gauging the benefits of enhancing VITA’s participation in the market. Consideration of VITA’s mission and operating requirements, both current and anticipated, are required before untested and unwarranted spectrum sharing plans are implemented. As set forth below, the commenting parties, by and large, have failed to address these issues meaningfully.

## DISCUSSION

### **I. VITA Should Not Be Required To Share Further The Spectrum To Which It Has Been Licensed.**

As VITA explained in its opening comments, the Commission’s spectrum sharing proposal overstates the potential for sharing with VITA and understates the adverse impact that sharing would have on VITA. The Commission did not take into account in the NPRM the fact that VITA lacks the flexibility of the other NVNG MSS systems and already must share its frequencies:

- VITA has access only to a small fraction of the bandwidth that other systems may use<sup>2</sup>;

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<sup>1</sup> NPRM at ¶ 48.

<sup>2</sup> VITA has been licensed to use only 90 kHz to uplink and 90 kHz to downlink, and must operate under rigid constraints within these bands. By contrast, ORBCOMM has been licensed to use 1275 kHz of spectrum, STARSYS has been licensed to use 1810 kHz of spectrum, and, under the licensing scheme proposed in the NPRM, NVNG MSS System-2 would be licensed to use 1,905 kHz of spectrum, and NVNG MSS System-3 would be licensed to use 810 kHz of spectrum.

- VITA must operate under rigid constraints in order to satisfy sharing requirements imposed by NTIA;
- VITA must share with Orbcomm, whose transmitters scan through VITA's uplink frequencies; and
- VITA may have to halve its downlink capacity to coordinate with a French satellite system.

Moreover, VITA currently has pending a first-round application for a second satellite that it will use to serve the expanding communications needs of developing countries and relief agencies. The Commission's spectrum allocation plan, which posits the possibility of time-sharing between VITA and another NVNG MSS operator, failed to consider that there may be more than one VITA satellite using VITA's assigned spectrum. Moreover, due to the significant sharing and operational requirements that already constrain VITA's use of the limited spectrum that it has been assigned, mandating additional sharing will impair VITA's ability to carry out its humanitarian mission and will prevent VITA from expanding its system as growth traffic develops. Given these circumstances, requiring VITA to share its already-limited spectrum based on a sharing technique that is untested and revolutionary is a recipe for disaster.

None of the other comments takes into account whether time-sharing would adversely affect VITA. The comments, however, do address whether the frequencies that the NPRM proposes for System-1 — the same frequencies that VITA presently is confined to — are adequate to support a Little LEO system. These comments underscore how limited VITA's spectrum is. For example, LEO One observes that a new system using VITA's frequencies would have only 5.7% of Orbcomm's downlink capacity and 8.4% of Orbcomm's uplink capacity, concluding that any "public benefit from the introduction of this system would be negligible."<sup>3</sup> Similarly, E-Sat believes that System-1 would have "so little spectrum that it is difficult to envision how any of the NVNG MSS applicants could implement even an interim system if limited to the bands proposed."<sup>4</sup> CTA also recognizes the "severe limitations of System-1."<sup>5</sup>

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<sup>3</sup> Comments of LEO One at 30-31.

<sup>4</sup> Comments of E-Sat at 13.

<sup>5</sup> Comments of CTA at 23.

VITA should not be required to share its spectrum to produce benefits that are “negligible.” Nor should VITA be required to share its spectrum, as some commenters have suggested, with a combined system incorporating the frequencies from System-1 and from one of the other systems proposed in the NPRM. If it is questionable whether the frequencies assigned to VITA will support “even an interim system” for a new applicant, then it would be unreasonable to limit VITA to those frequencies for its non-interim system and at the same time expect VITA to share the frequencies with an additional system. VITA already must share its frequencies with another first round system, government stations, and foreign Little LEO satellites, and any further sharing will jeopardize VITA’s mission.

## **II. VITA Should Not Be Excluded From The Second-Round Processing Group.**

### **A. VITA Should Not Be Treated Like A Commercial Operator For Purposes Of Determining The Level Of Market Diversity.**

VITA requested a third satellite and access to additional frequencies in the second round because the constraints associated with its authorized frequencies make it difficult for VITA to accomplish its mission. Excluding VITA from the second round would prevent VITA from redressing these shortcomings.

In the NPRM, the Commission proposed excluding first-round licensees from the second-round processing group.<sup>6</sup> Several parties, including a satellite licensee in another service, opposed this suggestion. Most thought it unfair and unlawful, while others thought that it would set a dangerous precedent.<sup>7</sup> All agreed that it would not serve the public interest.

A few parties, however, supported the Commission’s proposal. LEO One USA Corporation (“LEO One”) claimed that the exclusion of first round licensees, including VITA, would “increase competition and bring new services to market as quickly as possible.”<sup>8</sup> Final Analysis Communications Services, Inc. (“FACS”) argued that the market currently is highly concentrated and, for that reason, the Commission should exclude first round licensees from the second processing round.<sup>9</sup> Ironically, FACS

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<sup>6</sup> See, e.g., NPRM ¶¶ 11-12.

<sup>7</sup> See, e.g., Comments of Orbital Communications Corporation at 9-21; Comments of Iridium LLC; Comments of CTA at 28-32.

<sup>8</sup> Comments of LEO One at 5.

<sup>9</sup> Comments of FACS at 4-10.

considers the market highly concentrated, in part, because "VITA's operations are not commercially oriented and thus are not directly competitive with those of the other first round licensees."<sup>10</sup> CTA Commercial Systems, Inc. ("CTA") also suggested that VITA be excluded from any market analysis because the "non-profit, humanitarian nature of VITA's proposed service makes it an unlikely competitor of the other two licensed systems."<sup>11</sup>

These arguments are misplaced. It is precisely because VITA's system uses a small fraction of the spectrum made available to other systems that the Commission suggested licensing a second system (System-1) in the band licensed to VITA. The parties that now assert that VITA should be excluded from the second-round processing group ignore the significant spectrum concessions that VITA already has made to accommodate the Commission and other NVNG MSS operators.<sup>12</sup> In effect, excluding VITA from the second round would penalize VITA for its efforts to help foster the development of NVNG MSS systems, even at the risk of its private interests. Not only would such an approach be inequitable, it would set precisely the wrong precedent for the future.

The parties supporting the Commission's suggestion, moreover, have presented an incomplete picture: They claim that the market is highly concentrated, relying in part on the fact that VITA provides unique, non-commercial services to a segment of the market that commercial operators will not serve, while simultaneously overlooking the fact that increased competition from commercial operators will do nothing to satisfy the needs of the developing markets that VITA alone serves.

In commercial markets, new entry and increased competition often will lead to lower prices, increased service offerings, and other benefits to the public. Government policies that promote entry for commercial systems by denying spectrum to non-commercial systems, however, narrow rather than expand the range of services offered to the public. In this instance, VITA will provide services to segments of the market that no commercial NVNG MSS licensee will serve because the profit potential

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<sup>10</sup> Id. at 7.

<sup>11</sup> Comments of CTA at 13.

<sup>12</sup> Those opposing VITA's participation in the second round also mistakenly focus, as did the NPRM, on licenses rather than spectrum and thereby ignore the very substantial difference in the amount of spectrum that will be used by VITA. See n. 2, supra. In establishing rules for participation by first round licensees in the second round, the Commission needs to take this differential into account.

is insufficient to warrant the effort. These market segments will get the attention they deserve *only* if the Commission's licensing policies preserve the opportunity for non-commercial systems to obtain adequate and suitable spectrum. The addition of new commercial NVNG MSS operators to the market can be expected to have no impact on the price or quality of VITA's service and, to the extent that exclusion of VITA from the second processing round limits VITA's ability to serve what otherwise would be unserved segments of the market, will diminish, rather than expand, the range of services available to the public.

**B. VITA and Final Analysis Are Not Affiliated For Purposes Of The Commission's Rules.**

A few parties have urged the Commission to exclude FACS from the second processing round on the basis of its agreement with VITA.<sup>13</sup> These parties argue that VITA's satellite system is controlled by FACS and that, as a result, FACS should be deemed an affiliate of VITA that would be subject to the proposed exclusion of first round licensees and their affiliates from the current processing round.<sup>14</sup> In so arguing, these parties misconstrue the VITA-FACS agreement and revisit issues that already have been resolved by the Commission.<sup>15</sup>

To begin with, VITA's agreement with FACS is substantially the same as its prior arrangement with CTA, which was reviewed and approved by the Commission. As before, VITA will establish the technical specifications for its licensed facilities, which will be entirely separate from FACS's experimental facilities. As before, VITA will have a right to use 100% of its authorized communications capacity and lease 50% of its capacity to FACS.<sup>16</sup> As before, VITA will use the remaining 50% capacity for its humanitarian and non-commercial purposes consistent with its FCC grant. As before, VITA will direct the operation and use of the signals on its licensed frequencies and be responsible to the Commission as the licensee of those frequencies. As before, VITA

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<sup>13</sup> VITA's agreement is with Final Analysis, Inc., an affiliate of FACS. In the interest of simplicity, FACS and its affiliate are both referred to herein as "FACS."

<sup>14</sup> See Comments of CTA at 5-6; Comments of LEO One at 22.

<sup>15</sup> LEO One also asserts that the VITA/FACS agreement constitutes an attributable "joint marketing" or "joint operating" arrangement. Comments of LEO One at 22. This assertion has no basis in fact. VITA and FACS will market their capacity independently of one another, and will have independent control of their respective operations.

<sup>16</sup> As the Commission previously recognized, the fact that VITA has entered into an agreement to lease 50% of its capacity to FACS is itself an indication that VITA has full authority to "use" its capacity. VITA Order and Authorization, 78 R.R.2d at 1637.

will employ, supervise, and dismiss the personnel who will define the technical specifications for the VITA payload, oversee the operation and use of VITA's licensed frequencies, oversee TT&C operations (if applicable), manage VITA's provision of services to its customers, assure compliance with the Commission's rules, and otherwise participate in VITA's design and operation of its NVNG system.<sup>17</sup>

Moreover, to the extent that there are differences between the VITA-CTA and VITA-FACS agreements, they tend to increase, rather than decrease, the level of control that VITA will have over its satellite system. For example, unlike the CTA contract, the FACS contract expressly states that VITA will be the sole owner of the transponder(s) operating on the frequencies licensed to it.<sup>18</sup> In addition, the new agreement gives VITA sole responsibility for performing all billing and collection services on its own, rather than relying on FACS to perform this task. Finally, under the VITA-FACS agreement, both VITA and FACS will keep revenues generated from the use of their respective capacity rather than sharing revenues in accordance with a specified formula. By reducing the degree of interdependence between the parties, the VITA-FACS arrangement should diminish any concerns the Commission may previously have had regarding operational relationships. Accordingly, the Commission's earlier conclusion in the context of VITA's agreement with CTA that VITA retains *de facto* control over VITASAT-1 applies with equal or greater force to VITA's agreement with FACS.

Moreover, excluding FACS from the second round on the basis of the VITA/FACS agreement could sound the death knell for VITA's system. FACS has the right to terminate its agreement with VITA if any Commission authorizations granted pursuant to the agreement present a serious potential of disqualifying FACS in the NVNG MSS second round.<sup>19</sup> Disqualifying FACS on this basis, therefore, effectively could deprive VITA of the ability to have its satellite constructed and launched. Such

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<sup>17</sup> Given these contractual relationships, CTA's claim that "FACS will have full authority for the day-to-day operations of the satellite, possibly including employment, supervision and dismissal of personnel," Comments of CTA at 6, is misleading and mischaracterizes the VITA-FACS agreement. See VITA Order and Authorization, 78 R.R.2d at 1637 (noting the importance of VITA's control over key policy decision-makers and accounting and other personnel, as well as CTA's — now FACS's — quasi-contractual obligation to honor personnel-related requests by VITA that are necessary to enable VITA to discharge its obligations as a licensee).

<sup>18</sup> This change responds to the Commission's earlier concern that CTA would have held title to VITASAT-1. See VITA Order and Authorization, 78 R.R.2d at 1637.

<sup>19</sup> VITA/FACS Agreement, Article X.

a result would be contrary to the public interest, and the Commission should endeavor to avoid it.

### **III. The Parties Agree That The Commission Should Not Use Competitive Bidding To Award Licenses In This Service.**

In the NPRM, the Commission proposed to use auctions to license the remaining NVNG MSS spectrum in the event that mutual exclusivity exists. As the comments make abundantly clear, however, the negative ramifications of using competitive bidding to award licenses in this service far outweigh the benefits.

The Satellite Industry Association ("SIA") appended to its comments a study, prepared by Strategic Policy Research, demonstrating that auctions will add costs and risks to the development of satellite systems, reduce spectrum efficiency, and diminish the role of U.S. satellite operators and regulators in the global satellite market.<sup>20</sup> The advent of auctions would be particularly troublesome for VITA, which lacks the resources of its commercial Little LEO counterparts, and would find it increasingly difficult to carry on its mission as other countries followed the United States' auction lead. Even parties that might benefit from competitive bidding for spectrum urged the Commission, on policy grounds, to abandon its proposed use of auctions to resolve mutual exclusivity in this service.<sup>21</sup>

For the reasons discussed in VITA's initial comments, moreover, it is premature even to be considering auctions because it is unclear whether mutual exclusivity will exist. The Commission has yet to establish financial standards, to determine how many additional systems will be licensed in the second round, or to have an opportunity to examine how many applicants will remain for those systems once it adopts rules in this proceeding. In short, there may never be mutual exclusivity in the second round, and even if there were, there are compelling policy considerations that militate against the use of auctions.

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<sup>20</sup> See Comments of SIA at 2 & Attachments; see also Comments of Lockheed Martin Corporation at 2-10 ("auctions to assign spectrum for global and regional satellite systems would compromise U.S. economic and technological interests"); Comments of L/Q Licensee, Inc. at 2-11 (pre-requisites for auctions are not met in this service).

<sup>21</sup> See Comments of GE-Starsys Global Positioning, Inc. at 22-26. Indeed, the only party that even marginally supported the use of auctions was LEO One. LEO One recognized, however, that spectrum auctions present unique problems in the international and regional satellite context and urged that they be used only as a "last resort." Comments of LEO One at 61-62.

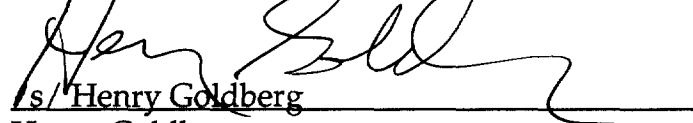


## CONCLUSION

For the reasons stated herein and in its initial comments, the Commission should include VITA and FACS in the second round processing group, and should not require VITA to share its frequencies with an additional system.

Respectfully submitted,

VOLUNTEERS IN TECHNICAL ASSISTANCE

A handwritten signature in dark ink, appearing to read "Henry Goldberg", is written over a horizontal line.

/s/ Henry Goldberg

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January 13, 1997

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A handwritten signature in cursive script that reads "Dawn Hottinger". The signature is written in black ink and is positioned above a horizontal line.

/s/ Dawn Hottinger

Dawn Hottinger

\*By Hand